**Keywords:** Non-medical prescribing/ Addiction/Patient safety/Opioid dependence
●**This article has been double-blind peer reviewed**

Medication errors can occur when non-medical prescribers treat opioid dependence, but following a consultation model can reduce this risk

# Safer prescribing for opioid dependence

## In this article...

- Medication prescribed to treat opioid dependence
- Overview of various consultation models
- How consultation models improve treatment and patient safety

## 5 key points

1. Deaths relating to opioid dependence totalled 51,000 in 2013, up from 18,000 deaths in 1990
2. Non-medical prescribers can treat patients addicted to opioids
3. NMPs are legally accountable for the prescriptions they issue
4. Inadequate NMP education can contribute to poor consultation practice and medical errors
5. Consultation models can help NMPs ensure they prescribe safely

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**Abstract** Solomon D (2016) Safer prescribing for opioid dependence. *Nursing Times*; 112: online issue 12, 5-8. Non-medical prescribers (NMPS) are able to treat people who are addicted to opioids, so it is vital they know how to prescribe safely to reduce medication errors. Consultation models provide a framework, structure and diagnostic base to help NMPs identify and safely treat opioid dependence. This article looks at poor prescribing practice and how NMPs can prescribe safely by comparing available specialist addiction consultation models for adults. It also highlights which models may be useful for NMPs to incorporate into their practice.

In the UK, there are 54,000 nurse and midwife non-medical prescribers (NMPs) who improve patient access to consultation and medication (Morris and Grimmer, 2014), and over 19,000 nurse independent prescribers and supplementary prescribers who improve treatment and patient safety (Royal College of Nursing, 2012). Independent prescribers can prescribe controlled drugs, including opioids, methadone and buprenorphine (Public Health England, 2014). Some NMPs may feel pressured into taking a wider responsibility for prescribing and signing repeat prescriptions for drugs, but may not receive adequate support from line management (Maddox et al, 2016).

### Non prescribing

A few NMPs choose not to prescribe, despite being professionally qualified to do so (RCN, 2012); factors associated with this include organisational change, role changes, lack of governance and lack of employer support. NMPs' confidence, knowledge and competence may also contribute to their non-prescribing (Bowskill et al, 2014).

### Opioid dependence

Opioid dependence is a chronic relapsing disorder associated with opioid misuse, which resulted in 51,000 deaths in 2013 – up from 18,000 deaths in 1990 (PHE, 2014). Its characteristics include:

- A strong desire to take opiates;
- Difficulties controlling opiate use;
- A physiological withdrawal state (Praveen et al, 2012).

Opioid dependence is diagnosed through consultation, history taking, physical examination and urinalysis (opiate metabolites in urine) (Praveen et al, 2012). The primary intervention is controlled drugs – such as methadone and buprenorphine – prescribed under the Drug Misuse Act (1971) (Hser et al, 2014) in primary care, community services, prisons, and substance misuse and mental health settings (PHE, 2014).

Alamy

Methadone is cost effective and can reduce injecting behaviour

## Treatment and safe prescribing

Methadone is cost-effective and can reduce injecting behaviour (Soyka, 2015). Treatment regimens involve slowly decreasing the dosage over time, which helps reduce the intensity of opiod withdrawal symptoms (Beck et al, 2014), including:

- *Early symptoms*: sweating, night sweats, increased tearing, insomnia, sleep disturbances, shivering, increased pulse, runny nose, yawning, skin crawling, heart pounding/palpitations, muscle aches and pains;
- *Psychological symptoms*: agitation, anxiety, mood changes, irritability, dysphoria;
- *Late symptoms*: abdominal cramping, diarrhoea, dilated pupils, goose bumps, nausea, vomiting.

(National Institute for Health and Care Excellence, 2015)

Methadone can result in adverse reactions (see Box 1) so NMPs must be cautious when prescribing controlled drugs such as this, due to the side-effects and potential risks of toxicity and diversion (selling the medication, storing it or giving it to friends) (NICE, 2015).

Buprenorphine is a first-line treatment for patients with opioid dependence and heart disease, as there are no adverse reactions relating to heart problems (Fareed et al, 2014). Other medications may be considered, such as lofexidine, antipsychotics, antidepressants and benzodiazepines for an opioid detoxification (Department of Health, 2007).

### BOX 1. ADVERSE REACTIONS TO METHADONE

- **Adverse reactions** to methadone include life-threatening respiratory depression, apnoea, respiratory arrest, circulatory depression, hypotension and death (Joint Formulary Committee, 2015)
- **Typical adverse reactions** to methadone include constipation, nausea, somnolence, dizziness, vomiting, pruritus, headache, dry mouth, asthenia and sweating and cardiac complications (Fareed et al, 2014)

They should also follow an appropriate consultation model (Kurtz et al, 2005), ensuring the consultation includes assessment of the patient's medical history to gather information that can be used to address other pharmacological issues and formulate a prescribing plan (Silverston, 2014).

The decision to prescribe should include a discussion with colleagues in the multidisciplinary team and be supported by clinical documentation (PHE, 2014). This encourages NMPs to review the assessment and ensure an appropriate clinical judgement has been made (Morris and Grimmer, 2014). Patient safety must remain paramount in the consultation (Maddox et al, 2016).

***"Opioid dependence is also associated with risks of overdose, death and infection with blood-borne viruses such as HIV, hepatitis B and hepatitis C"***

Opioid dependence is also associated with risks of overdose, death and infection with blood-borne viruses such as HIV, hepatitis B and hepatitis C. Therefore, there is a need for harm minimisation advice on safer sex, needle exchange and immunisation (World Health Organization, 2009).

To treat opioid dependence safely, NMPs must:

- Be competent;
- Never prescribe on demand;
- Follow an evidence base;
- Know what their patient is taking;
- Consider individual patient factors;
- Be aware of the interactions between drugs and avoid polypharmacy;
- Involve the patient in the decision-making process;
- Review and monitor medication (Petty, 2013).

## Consultation models

Consultation models provide a structure, while aiding analysis and improving patient safety (Courtenay, 2010). A lack of structure in consultation can contribute to poor patient safety, medication errors and poor decision-making by NMPs (Maddox et al, 2016).

Balint's theory of consultation (adapted from Charlton, 2006) shows there are three factors to consider before consultation:

- Nearly all problems presented to the practitioner have a psychological element, which needs exploring;
- The practitioner has feelings in a consultation – these must be recognised and can be used to benefit patients;
- The practitioner has a positive therapeutic role in all consultations, not only in those with a defined disease process.

These should be kept in mind when conducting a consultation.

There are several models of consultation with systematic structures and approaches that are relevant to specialist addiction, which includes opioid addiction (Table 1).

Neighbour's (1987) Inner Consultation Model, which is both safe and popular, adopts a five-stage assessment approach that promotes partnership, while the Calgary-Cambridge model (Kurtz et al, 2003; Kurtz and Silverman, 1996) is combined with a practical teaching tool for NMPs. The Calgary-Cambridge model is brief and systematic, provides a structure and helps to build a relationship with patients (Courtenay, 2010). In addition, it can be applied in all clinical settings for NMPs and the steps identified are already used in day-to-day communication (Kessler et al, 2012).

Stewart and Roter's (1989) Disease Illness Model demonstrates a parallel search of two distinct frameworks: the 'disease' and the 'illness'. The patient presents with a complaint and the NMP gathers a thorough medical history; the NMP can then either concentrate on the illness framework – which includes the patient's agenda, ideas, concerns, expectations and feelings, thoughts and effects – or deliver the consultation from a disease framework perspective, which includes assessing from their own agenda the symptoms, signs, investigations and underlying pathology. Both frameworks provide an understanding of the patient's experience of the problem and can lead to a differential diagnosis.

The Disease Illness Model integrates the two frameworks to initiate planning and explain the consultation to the patient (Denness, 2013), but it lacks a holistic approach and does not consider issues such as concordance with treatment (Bowskill et al, 2014).

## Communication

Communication difficulties between NMPs and patients – including a lack of documentation, reporting and adherence to protocol and guidance – are strong contributors to medical errors (Maddox et al, 2016). A randomised study using an educational intervention to assess GPs' consultation skills found that a standardised educational model (similar to the Calgary-Cambridge model) increases the effectiveness of consultation communication in emergency departments (Kurtz et al, 2003). As such, the Calgary-Cambridge model may be useful for NMPs.

TABLE 1. **CONSULTATION MODELS**

| Model/mechanism | Key elements | Advantages |
|---|---|---|
| **Steps for improving communication (Weiner, 1948)** | Key steps in improving communication, information source, transmitter, receiver, destination, feedback, clarification and reflection | ● Improves methods for feedback<br>● Enhances consultation review, enabling continuity of safe prescribing and risk management |
| **Transactional analysis (Berne, 1964)** | Transactional analysis is a game of social interchange. Different roles may present in each individual such as the role of parent (authority), adult (logical) and child (intuitive) | ● Effective for tackling communication issues, as considers consultation as social interchange |
| **ABCD approach (Stott and Davies, 1979)** | For GP consultation and teaching, theoretical approach, bio-psychosocial approach.<br>A Management of presenting problems<br>B Modification of help-seeking behaviour<br>C Management of continuing problems<br>D Opportunistic health promotion | ● Based on theoretical framework<br>● Effective for consultation management and therefore safe prescribing |
| **7-step structure: what and why? (Helman, 2001)** | 1. What has happened?<br>2. Why has it happened?<br>3. Why to me?<br>4. Why now?<br>5. What would happen if nothing was done about it?<br>6. What are the likely effects on others if nothing is done?<br>7. What should I do about it? | ● Patient-centred, explorative<br>● Addresses problems systematically, enhancing the prescribing process safely |
| **5 steps of understanding (Pendleton and Schofield, 1984)** | 1. Understand the problem<br>2. Understand the patient<br>3. Share understanding<br>4. Share decisions and responsibility<br>5. Maintain the relationship | ● Allows detailed analysis and feedback, which is important in managing controlled drugs (medication patient safety) |
| **The Inner Consultation (Neighbour, 1987)** | Connecting, summarising, handing over, safety-netting and housekeeping | ● Promotes partnership<br>● Popular and safe |
| **Disease Illness Model (Stewart and Roter, 1989)** | Practitioner gathers thorough medical history, then follows illness framework (patient's agenda, ideas, concerns, expectations and feelings, thoughts and effects) or disease framework (assesses symptoms, signs, investigations and underlying pathology from NMP's agenda) | ● Defines relationship between disease and illness<br>● Lacks holistic approach |
| **Calgary-Cambridge model (Kurtz et al, 2005; Kurtz and Silverman, 1996)** | Initiating the session, gathering information, physical examination, explanation and planning, and closing the session | ● Collaborative<br>● Considered one of the most effective models for safe prescribing |

Further sources: Charlton (2006), Courtenay (2010)

The 5Cs of consultation (contact, communicate, core question, collaboration, closing the loop) can be used to improve a prescriber's ability to relay appropriate information and communicate effectively during consultation (Kessler et al, 2012). The study undertaken by Kessler et al (2012) showed that a lack of training and formal education for health professionals can lead to errors, such as medication mistakes or not detailing a patient's medical history.

Other models, such as that developed by Weiner (1948), place emphasis on basic initiation by the sender and interpretation by the receiver. This implies that NMPs need to observe a patient's body language to effectively communicate through observations, verbal cues and non-verbal signs. Communication can improve negotiations among medical and nursing colleagues and the patient relationship, as well as helping to resolve potential conflicts in consultation (Denness, 2013).

Medication errors can stem from the wrong drug, dose, route, frequency or quantity (Morris and Grimmer, 2014), while poor communication can lead to medications not being taken as intended (Nuttall, 2011). A lack of monitoring and follow-up can also lead to adverse drug reactions. NMPs should remember that legal responsibility remains with the prescriber who signs the prescription (Petty, 2013).

## Conclusion

Future studies should explore consultation models in NMP practice and how they affect the treatment of specialist addictions. Poor consultation skills are associated with poor communication, medication errors and poor decision-making for patients (Maddox et al, 2016), but NMPs can improve outcomes by using consultation models to guide their practice. NMPs must be aware of their own professional, legal and ethical accountability when caring for patients with opioid dependence (NMC, 2015), and understand that not using a consultation model can encourage poor decision making and consultation structure, thereby jeopardising patient safety (Carey and Stenner, 2011). **NT**

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